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US Army Corps of Engineers
Philadelphia District

Public Notice

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In Reply Refer to: Environmental Resources Branch

BETHANY BEACH AND SOUTH BETHANY STORM DAMAGE REDUCTION PROJECT - DRAFT ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT SUSSEX COUNTY, DELAWARE

Pursuant to Section 102 of the National Environmental Policy Act, Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, NOTICE IS HEREBY GIVEN THAT the Philadelphia District, U.S. Army Corps of Engineers, has completed a draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for public and agency review, which provides a supplemental evaluation of the proposed sand source (Area E) for the Bethany Beach and South Bethany Storm Damage Reduction Project. The EA/FONSI is being issued pursuant to 33 CFR 230.10 and 230.11 and is intended to present and evaluate new information and alternatives for the Bethany Beach and South Bethany Storm Damage Reduction Project located along the Atlantic Coast of Delaware. This document provides an update on information and modifications of the berm and dune restoration plan that was developed to reduce hurricane and storm damages for the communities of Bethany Beach and South Bethany, Delaware. This plan was originally proposed in 1998 in the Final Environmental Impact Statement (FEIS) for the Bethany Beach and South Bethany Interim Feasibility Study and in Public Notices CENAP-PL-E-97-08 and CENAP-PL-E-98-06. This project is being cost-shared between the Federal government and the Delaware Department of Natural Resources and Environmental Control, which is the non-Federal sponsor.

The 1998 EIS identified a plan in the form of berm and dune restoration utilizing beachfill to reduce storm damages for the communities of Bethany Beach and South Bethany, Delaware (Figures 1 and 2). Specifically, the proposed plan includes the following features:

- For Bethany Beach, the proposed plan requires a berm extending seaward a minimum of 150 ft.* from the design line at an elevation of +7 ft. North American Vertical Datum (NAVD). For South Bethany, the selected plan requires a berm extending seaward a minimum of 150 ft.* from the design line at an elevation of +7 ft. NAVD. Both berm plans have a foreshore slope of 1V:15H to mean low water (MLW). From MLW seaward, the slope parallels the bottom out to the depth of closure. Both berm plans include taper zones to the north and south of both town borders for a total project length of 14,950 linear feet.
- On top of both berm plans, in both communities, a dune with a top elevation of +16 ft NAVD and a top width of 25 ft would be constructed. The landward and seaward slope of the dune face would be 1V:5H.

- A total sand fill quantity of approximately 3.5 million cubic yards is required for the initial fill placement in Bethany Beach and South Bethany.
- Dune restoration requires approximately 24 acres of planted dune grass and approximately 23,157 l.f. of sand fence for stabilization of sand on the dune.
- 41 dune walkovers are provided (one at each street end) and 1 vehicle accessway over the dune in Bethany Beach. The vehicle access for South Bethany is located approximately 0.25 miles south of the southern limit of South Bethany within Fenwick Island State Park.
- To maintain the design template, approximately 480,000 cubic yards of sandy beachfill from the offshore sand source would be required every 3 years for the 50-year project life.
- The proposed sand source for initial construction is the middle portion of Area E, which is a 775-acre area approximately 1.5-2.8 nautical miles offshore of South Bethany (Figure 3). Sandy material for periodic nourishments would be required to be dredged from areas either to the north or south of the middle portion. Two types of dredges may be used to obtain the sand. A cutter head-suction dredge and/or a hopper dredge. Use of a hopper dredge may involve dredging past overflow to maximize hopper loads.

  *This represents the design template berm width, which is the minimum berm after the filled beach adjusts to wave action. The construction template (including a quantity of advance "sacrificial" nourishment) will result in a significantly wider berm than the design template berm because the beach will be initially "overbuilt". This construction method enables the economic use of standard earth-moving equipment for the distribution of the fill and minimizes relocation of the discharge point. The result is a beach berm that is initially considerably wider (up to two to three times) than the target design width. After the first storm season, the berm is expected to adjust landward becoming considerably smaller as the subaqueous beachfill material moves seaward.

Subsequent to the EIS, new information became available concerning the sand source (Area E) that requires additional evaluation with respect to fisheries and the potential for encountering unexploded ordnance (UXO) during initial construction and periodic nourishment. The environmental assessment provides an evaluation of the proposed plan with respect to essential fish habitat pursuant to the reauthorized Magnuson-Stevens Fisheries Management Act of 1996, and an evaluation of various measures to minimize the potential for depositing unexploded ordnance on the beach as a result from dredging within the proposed offshore sand source, which is known to be contaminated with UXO. In addition to the authorized storm damage reduction plan in the 1998 EIS, the preferred alternative for UXO identified in the EA includes a combination of screening measures to preclude UXO from entering the dredge and beach, a pre-dredge remote sensing survey within the sand source, and monitoring for UXO during construction.

In accordance with the National Environmental Policy Act, a draft EA and FONSI have been developed for this evaluation, and are being circulated to the appropriate Federal, state, and local agencies; and other public interests. Requests for this document should be made to the U.S. Army Corps of Engineers, Philadelphia District, at (215) 656-6515.

Impacts to Water Quality have been evaluated in accordance with the Section 404(b)(1) guidelines of the Clean Water Act, and are not adverse. In accordance with Section 401 of the Clean Water Act, Water Quality Certification is being requested from the Delaware Department

of Natural Resources and Environmental Control.

In accordance with Section 307 (c) of the Coastal Zone Management Act, an activity affecting land or water uses in a State's coastal zone must comply with the State's Coastal Zone Management Program. A conditioned certification of compliance was originally issued by the Delaware Department of Natural Resources and Environmental Control in October, 1998. A new Federal consistency certification is being requested based on the new information concerning the sand source.

It has been determined that the proposed work would not affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act as amended.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all Federal agencies to consult with the National Marine Fisheries Service on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely effect Essential Fish Habitat (EFH). An assessment of the effects of the proposed action on listed species and their life stages within this area is provided in the EA, and indicates the project would not have significant adverse effects on EFH.

Review of the National Register of Historic Places indicates that no registered properties, or properties listed as eligible for inclusion, would be impacted.

All practicable means to avoid or minimize adverse environmental effects have been incorporated into the recommended plan.

The public and all agencies are invited to comment on this proposal. Copies of the Draft EA and FONSI are available upon request by calling (215) 656-6515. Copies of this document will be provided for public review in the South Coastal Public Library in Bethany Beach. More information on this work is also available for public review at the Philadelphia District Office.

Any person may request, in writing, to the District Engineer, within the comment period specified in this notice (August 8, 2005 – September 7, 2005), that a public hearing be held to consider this proposal. Requests for a public hearing shall state, in detail, the reasons for holding a public hearing.

All comments on the work described in this public notice and/or in the draft EA and FONSI should be directed to Mr. Minas M. Arabatzis, ATTN: Environmental Resources Branch, U.S. Army Corps of Engineers, Wanamaker Building, 100 Penn Square East, Philadelphia, Pennsylvania 19107-3390 by September 7, 2005.

Minas M. Arabatzis
Chief, Planning Division
Philadelphia District
U.S. Army Corps of Engineers

Figure 1. Bethany Beach Segment

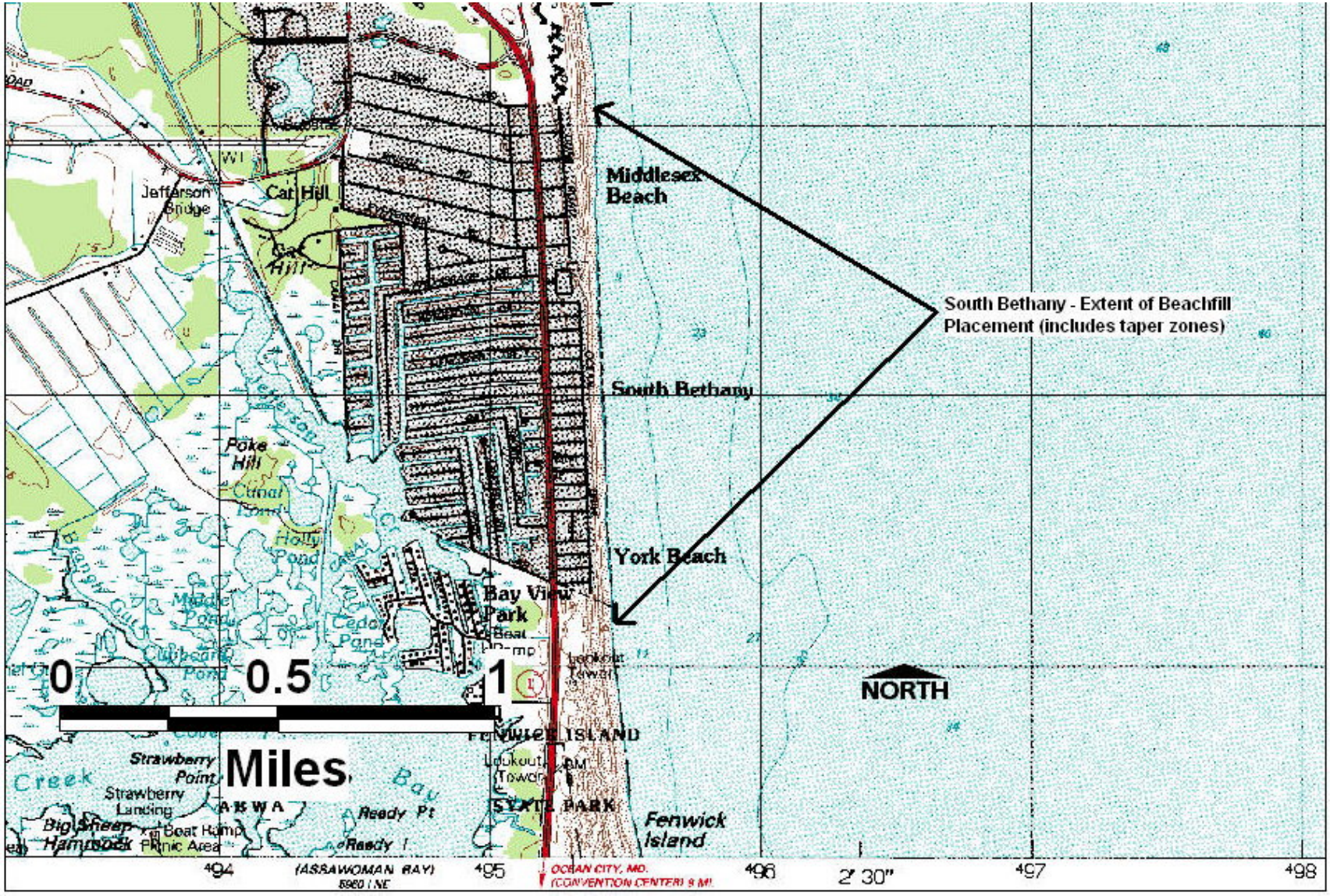

Figure 2. South Bethany Segment

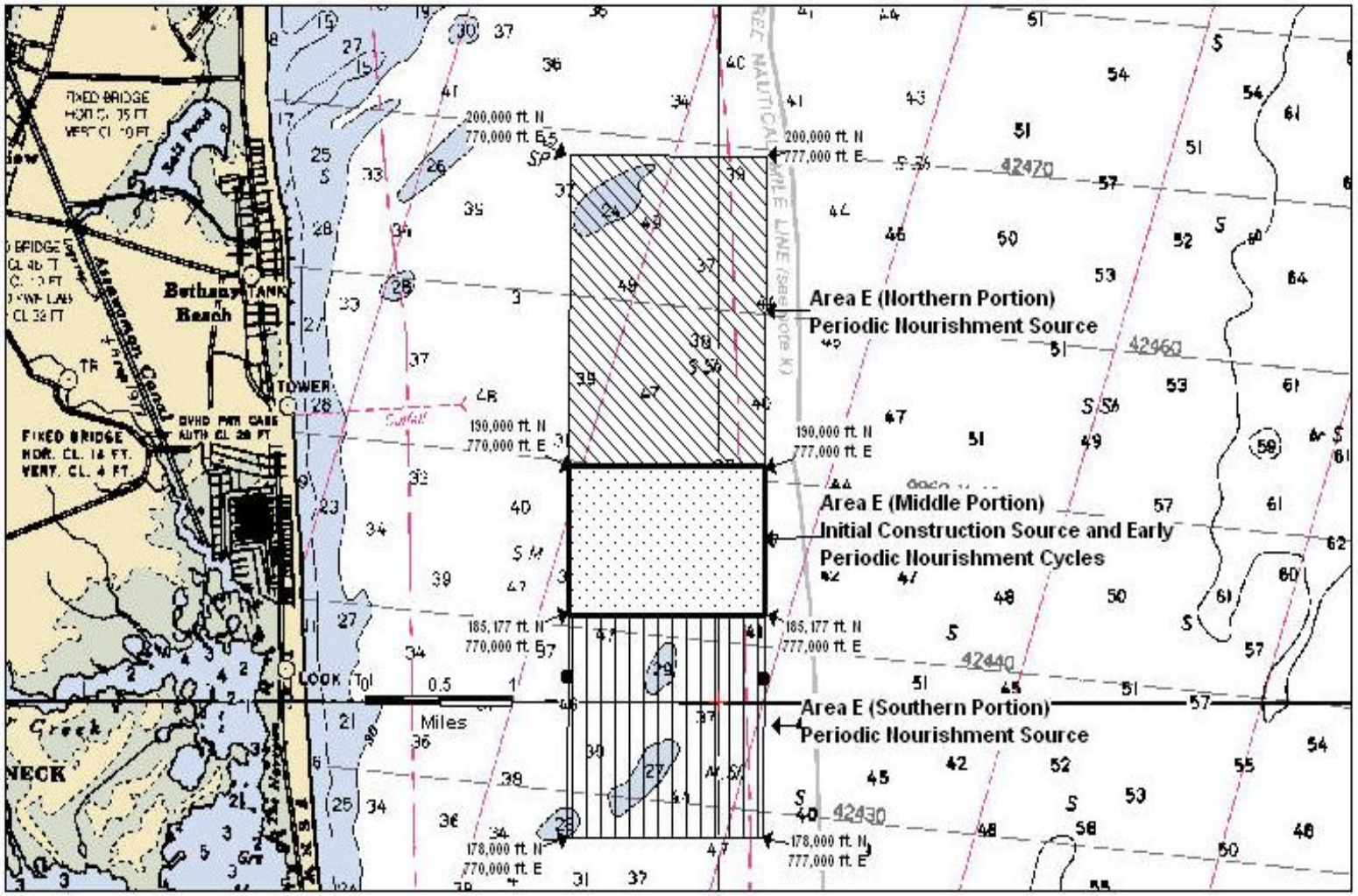

Figure 3. Proposed Sand Source (Area E) Location

U.S. ARMY CORPS OF ENGINEERS
PHILADELPHIA DISTRICT
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